

EXPRESS MAIL NO.: EL615211400US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:
Larry E. Mobraaten et al.

Application No.: 10/051,956

Filed: January 16, 2002

For: **MAINTENANCE OF GENETIC LINES
IN MICE USING CRYOGENICALLY-
PRESERVED SPERM**



Art Unit: 1642

Examiner: To be assigned

Attorney Docket No.:
03887.0002.NPUS00

TECH CENTER 1600/2800

JUL 15 2002

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**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R.
§1.56, 1.97 and 1.98**

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicants submit the following documents for appropriate action by the U.S. Patent and Trademark Office:

- ☒ Information Disclosure Statement under 37 C.F.R. §1.56, 1.97 and 1.98
- ☒ Form PTO-1449 (3 pages) with 43 references
- ☒ Return postcard.

Applicant believes no fees are due in connection with this Petition. However, if any fees are in fact due, the Commissioner is hereby authorized to be charged to our Deposit Account No.08-3038 referencing Docket No. 03887.0002.NPUS00.

Respectfully submitted,

Date: July 8, 2002

Albert P. Halluin, Reg. No. 25,227

HOWREY SIMON ARNOLD & WHITE, LLP
Box No. 34
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Information Disclosure Statement

Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicant hereby submits, without admission of prior art effect thereof, the documents listed on the accompanying Form PTO-1449 pursuant to the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicant has listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

This Information Disclosure Statement is being filed within three months of the U.S. filing date or before the mailing date of a first Office Action on the merits, therefore no statement under 37 C.F.R. § 1.97(e) or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

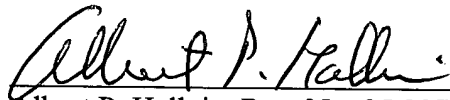
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The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. **08-3038**, referencing Howrey Docket No. 03887.0002.NPUS00.

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FORM PTO-1449

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

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SERIAL NO.

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA	4,589,402	05/20/86	Hodgen et al.	128	1	07/26/84
	AB	4,599,227	07/08/86	Dees et al.	424	38	11/07/83
	AC	4,845,077	07/04/89	Hodgen	514	2	07/09/87
	AD	5,162,306	11/10/92	Donaldson	514	12	03/08/91
	AE	5,272,086	12/21/93	Pineda et al.	435	297.1	11/25/97
	AF	5,585,234	04/15/94	Naz et al.	435	2	04/15/94
	AG	5,627,066	05/06/97	Gordon	435	2	04/31/95
	AH	5,693,534	12/02/97	Alak et al.	435	366	06/05/95
	AI	5,882,928	03/16/99	Moses	435	375	03/27/97
	AJ	5,959,075	09/28/99	Lok et al.	530	303	08/01/97
	AK	6,071,689	06/06/00	Seidel et al.	435	2	01/29/98
	AL	6,132,952	10/17/00	Cohen et al.	435	2	06/01/98
	AM	6,196,965	03/06/01	Purdum	600	34	05/21/99
	AN	6,281,013	08/28/01	Grondahl	435	363	03/20/00

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATI YES NO
	AO	WO 00/32140	06/08/00	PCT			X
	AP	WO 01/49204 A1	07/12/01	PCT			X

EXAMINER:

Examiner

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

AQ	Baker, H.J. (1988) Rederivation of inbred strains of mice by means of embryo transfer. <i>Lab. Anim. Sci.</i> 38 :661-2.
AR	Critser, J.K. and L.E. Mobraaten. (2000) Cryopreservation of murine spermatozoa. <i>ILAR J.</i> 41 :197-206.
AS	Glenister, P.J., D.G. Whittingham and M.J. Wood. (1990) Genome cryopreservation – A valuable contribution to mammalian genetic research. <i>Genet. Res.</i> 56 :253-258.
AT	Glenister, P. and C. Thornton. (2000) Cryoconservation – archiving for the future. <i>Mamm. Genome</i> 11 :565-71.
AU	Gordon, J.W. and U. Dapunt. (1993) Restoration of normal implantation rates in mouse embryos with a hatching impairment by use of a new method of assisted hatching. <i>Fertility and Sterility</i> 59 :1302-7.
AV	Hogan, N. (1994) In: Manipulating the mouse embryo: A laboratory manual, Cold Spring Harbor Laboratory, Cold Spring Harbor Press, Plainview, N.Y.
AW	Khalifa, E-A. M., M.J. Tucker and P. Hunt. (1992) Cruciate thinning of the zona pellucida for more successful enhancement of blastocyst hatching in the mouse. <i>Hum. Repro.</i> 7 :532-6.
AX	Kimura, Y., and R. Yanagimachi. (1995) Intracytoplasmic sperm injection in the mouse. <i>Biol. Reprod.</i> 52 :709-20.
AY	Mansour, R.T., C.A. Rhodes, M.A. Aboulghar, G.I. Serour and A. Kamal. (2000) Transfer of zona-free embryos improved outcome in poor prognosis patients: a prospective randomized controlled study. <i>Hum. Repro.</i> 15 :1061-4.
AZ	Mobraaten, L.E. (1986) Mouse embryo cryobanking. <i>J. In Vitro Fert. Emb. Transfer</i> 56 :253-8.
BA	Mobraaten, L.E. (1998) Cryopreservation centres: a means to archive. In <i>Novel Systems for the Study of Human Disease: From Basic Research to Applications</i> , OECD, Editor, Organisation for Economic Co-operation and Development, Paris: Rome, Italy, p. 321-8.
BB	Morrell, J.M. (1999) Techniques of embryo transfer and facility decontamination used to improve the health and welfare of transgenic mice. <i>Lab. Animal</i> 33 :201-6.
BC	Naito, K., Y. Toyoda and R. Yanagimachi. (1992) Production of normal mice from oocytes fertilized and developed without zonae pellucidae. <i>Hum. Reprod.</i> 7 :281-5.
BD	Nakagata, N. and T. Takeshima (1992) Cryopreservation of mouse spermatozoa from inbred and F1 hybrid strains. <i>Jikken Dobutsu</i> 42 :317-20.

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BE	Nakagata, N., M. Okamoto, O. Ueda and H. Suzuki (1997) Positive effect of partial zona-pellucida dissection on the in vitro fertilizing capacity of cryopreserved C57BL/6J transgenic mouse spermatozoa of low motility. <i>Biol. Reprod.</i> 57 :1050-55.
BF	Odawara, Y. and A. Lopata (1989) A zona opening procedure for improving in vitro fertilization at low sperm concentrations: a mouse model. <i>Fert. Steril.</i> 51 :699-704.
BG	Odawara, Y., K. Matsumoto, S. Shinozuka, K. Kusuhashi and Y. Terashima (1995) Zona manipulation in an assisted reproductive technologies (ART) programme. <i>J. Obstet. Gynaecol.</i> 21 :83-8.
BH	Quinn, P., Kerin, J.F. and G.M. Warnes. (1985) Improved pregnancy rate in human in vitro fertilization with the use of a medium based on the composition of human tubal fluid. <i>Fertil. Steril.</i> 44 :493-8.
BI	Reetz, I.C., M. Wullenweber-Schmidt, V. Kraft and H.J. Hedrich. (1988) <i>Lab. Anim. Sci.</i> 38 :696-701.
BJ	Sharp, J. and L. Mobraaten (1997) To save or not to save: the role of repositories in a period of rapidly expanding development of genetically engineered strains of mice. In <i>Transgenic Animals: Generation and Use</i> , L.-M. Houdebine, Editor, Harwood Academic Publishers, Switzerland, pp. 525-32.
BK	Sharp, J., C. Linder and L. Mobraaten. (2001) Genetically engineered mice. Husbandry and resources. <i>Methods Mol. Biol.</i> 38 :661-2.
BL	Suzuki, H., K. Yorozu, T. Watanabe, M. Nakura and J. Adachi. (1996) Rederivation of mice by means of in vitro fertilization and embryo transfer. <i>Exp. Anim.</i> 45 :33-8.
BM	Sztejn, J.M., S. Farley, A.F. Young and L.E. Mobraaten. (1997) Motility of cryopreserved mouse spermatozoa affected by temperature of collection and rate of thawing. <i>Cryobiology</i> 35 :46-52.
BN	Sztejn, J.M., J.S. Farley and L.E. Mobraaten. (2000a) In vitro fertilization with cryopreserved inbred mouse sperm. <i>Biol. Reprod.</i> 63 :1774-80.
BO	Sztejn, J.M., M.J. O'Brien, J.S. Farley, L.E. Mobraaten and J.J. Eppig. (2000b) Rescue of oocytes from antral follicles of cryopreserved mouse ovaries: competence to undergo maturation, embryogenesis, and development to term. <i>Hum. Reprod.</i> 15 :567-71.
BP	Sztejn, J.M., K. Noble, J.S. Farley and L.E. Mobraaten. (2001) Comparison of permeating and nonpermeating cryoprotectants for mouse sperm cryopreservation. <i>Cryobiology</i> 42 :28-39.
BQ	Yokoyama, M., H. Akiba, M. Katsuki and T. Nomura. (1990) Production of normal young following transfer of mouse embryos obtained by in vitro fertilization using cryopreserved spermatozoa. <i>Jikken Dobutsu</i> 39 :125-8.

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